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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/405,901	09/24/1999	CHARLES WECKEL	18561-051	1026

24319 7590 01/20/2004

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EXAMINER

AN, SHAWN S

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/405,901

Applicant(s)

WECKEL ET AL.

Examiner

Shawn S An

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8-13 and 19-26 is/are rejected.
- 7) ☒ Claim(s) 3-7 and 14-18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 8-13, and 19-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohki (5,719,628).

Regarding claims 1-2, 9-13, and 20-26, Ohki discloses an apparatus /method/storage for encoding video frames, comprising:

a decoder for decoding a coding unit (col. 1, lines 13-25),

a motion compensator for adding coding units outputted from the spatial decoder to predictions derived from reconstructed reference pictures (col. 6, lines 33-37),

a frame memory for storing the reconstructed reference pictures, wherein a coding unit of image is reconstructed from a coding unit designated for refreshing without data from another coding unit or picture (col. 6, lines 20-32),

a source for supplying a sequence of $K > 1$ frames, each of which is divided into an $m > 1$ row x $n > 1$ column array of non-overlapping coding units of equal sizes, each coding unit occupying a respective coding unit position in the picture from which it was divided (Fig. 2, 200), and

an inter/intra decision circuit for selecting an arbitrary, pseudo random pattern of coding units for refreshing during each of the K pictures, each pattern selected during any given one of the K pictures including a sequence of one or more coding units of the array (col. 4, lines 1-8),

wherein the pixels of each coding unit selected for refreshing during a Kth picture occupy different pixel positions than during a preceding one of the 1st to (K-1) th pictures of the K pictures, and wherein each pixel position of a moving picture image from the K pictures is selected for refreshing over the sequence of K pictures (abs.).

Regarding claims 8 and 19, Ohki discloses each coding unit being interlaced field coding unit, wherein spatially interleaved field coding units from a single given frame are refreshed during sequential pictures (abs.)

3. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohki (5,719,628).

Regarding claim 11 and 22, since Ohki discloses that portions of lines in each respective field are designated for forced refreshing (abs.), it is considered an obvious feature to start the coding unit position which is offset from the leftmost coding unit position of the row of the array containing the beginning of the sequence by one or more coding unit positions, and end at a coding unit position which is offset from the rightmost coding unit position of the row of the array containing the end of the sequence by one or more coding unit positions, or both.

Allowable Subject Matter

4. Claims (3-7) and (14-18) are objected to as being dependent upon a rejected base claims 1 and 12, respectively, but would be allowable: if claim 3 is rewritten in independent form including all of the limitations of the base claim 1 and any intervening claims; and if claim 14 is rewritten in independent form including all of the limitations of the base claim 12 and any intervening claims.

Dependent claims 3 and 14 recite the novel feature comprising the step of: during at least one of the K pictures, selecting plural sequences of coding units of fixed length q, the first coding unit of each of the selected sequences being offset from the first coding unit of the next selected sequence by $q \cdot k$ coding unit positions.

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Accordingly, if the amendments are made to the claims listed above, and if rejected claims are canceled, the application would be placed in a condition for allowance.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

A) Miyamoto (6,574,277 B1), Moving-picture coding apparatus and method.

6. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number (703) 305-0099 and schedule are Tuesday-Friday.

SHAWN S. AN
CONTENT EXAMINER



SSA

1/13/04